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PHOTOGRAPHIC INTERPRETATION REPORT

ICBM COMPLEX, YOSHKAR-OLA, USSR

NPIC/R-241/64
April 1964

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

Declassification Review by NIMA / DoD

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25X1A

Launch Site A (TDI Site 1)	56-35N 48-10E	BE No [redacted]
Launch Site B (TDI Site 2)	56-35N 48-18E	BE No
Launch Site C (TDI Site 3)	56-32N 48-26E	BE No
Launch Site D (TDI Site 4)	56-30N 48-20E	BE No
Launch Site E (TDI Site 5)	56-33N 48-13E	BE No
Launch Site F (TDI Site 6)	56-36N 48-26E	BE No

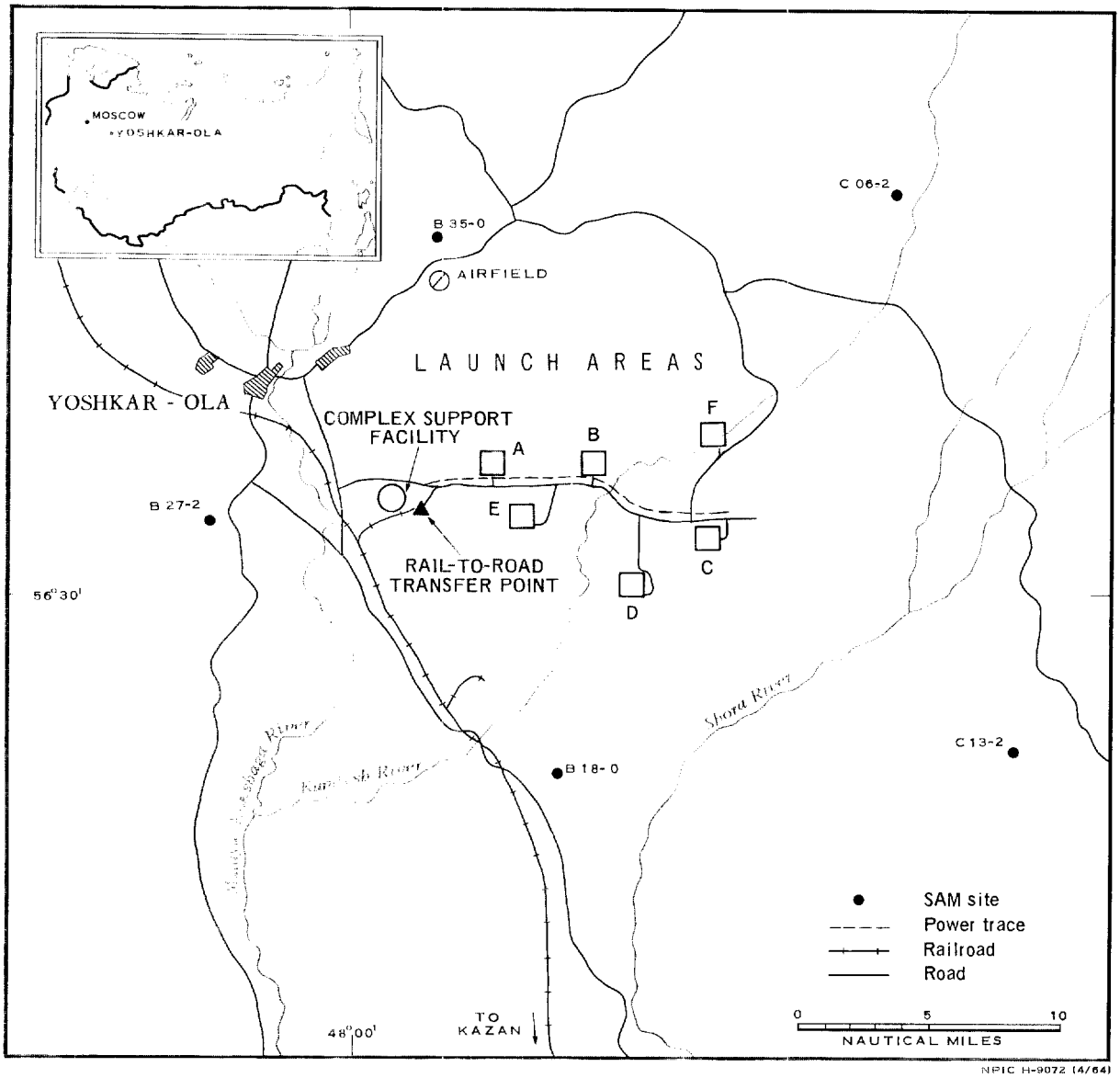

FIGURE 1. LOCATION OF YOSHKAR-OLA ICBM COMPLEX.

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ICBM COMPLEX, YOSHKAR-OLA, USSR

INTRODUCTION

The Yoshkar-Ola ICBM Complex is east-southeast of the town of Yoshkar-Ola (Figure 1). It is situated in a forested area surrounded by agricultural land. The terrain varies from generally flat to slightly rolling with an average elevation of 500 feet above sea level.

The complex consists of a complex support facility, a rail-to-road transfer point, and six launch areas, three Type IIB and three Type IID. Orientation of the launch sites is 335 degrees plus or minus 5 degrees. Wide-radius turns are characteristic of all curves and road junctions throughout the complex road system. The complex support facility and Launch Area A were first identified in [redacted] 25X1D
[redacted] They were not present 25X1D
in [redacted] 25X1D
Subsequent missions over the complex revealed an additional launch area and the rail-to-road transfer point in [redacted] two launch areas in [redacted] 25X1D 25X1D

Five SAM sites have been identified around the complex:

Yoshkar-Ola ICBM Complex SAM Site B18-0, BE No [redacted]
Yoshkar-Ola ICBM Complex SAM Site B27-2, BE No
Yoshkar-Ola ICBM Complex SAM Site B35-0, BE No
Yoshkar-Ola ICBM Complex SAM Site C06-2, BE No
Yoshkar-Ola ICBM Complex SAM Site C13-2, BE No

25X1A

COMPLEX SUPPORT FACILITY

The complex support facility (56-34N 48-03E) is about 7 nautical miles (nm) southeast of the town of Yoshkar-Ola at the western extremity of the forested area containing the complex. It is rail and road served, respectively, from the Yoshkar-Ola/Kazan rail line and the highway running south from Yoshkar-Ola. The support facility consists of a railhead and storage area and three housing areas, two of which also contain administration-type buildings (Figure 2). No security measures are evident.

The railhead and storage area contains 4 rail spurs, open storage, about 45 buildings, and an equipment pool. The four rail spurs are each approximately 2,500 feet long and evenly spaced 550 feet apart. There are 15 various-sized buildings and open storage between the rail spurs. Most of the remaining buildings, 10 of which are over 100 feet long, the equipment pool, and a probable open storage area are adjacent to the rail spur on the southwest side. A road- and rail-served probable POL storage area is south of the rail spurs.

One of the housing areas is situated south of the railhead and storage area and west of the main rail spur serving the complex. This area contains 25 barracks-type buildings and 12 smaller buildings which are possibly single-family housing units. A possible motor pool is situated at the north end of the area. The

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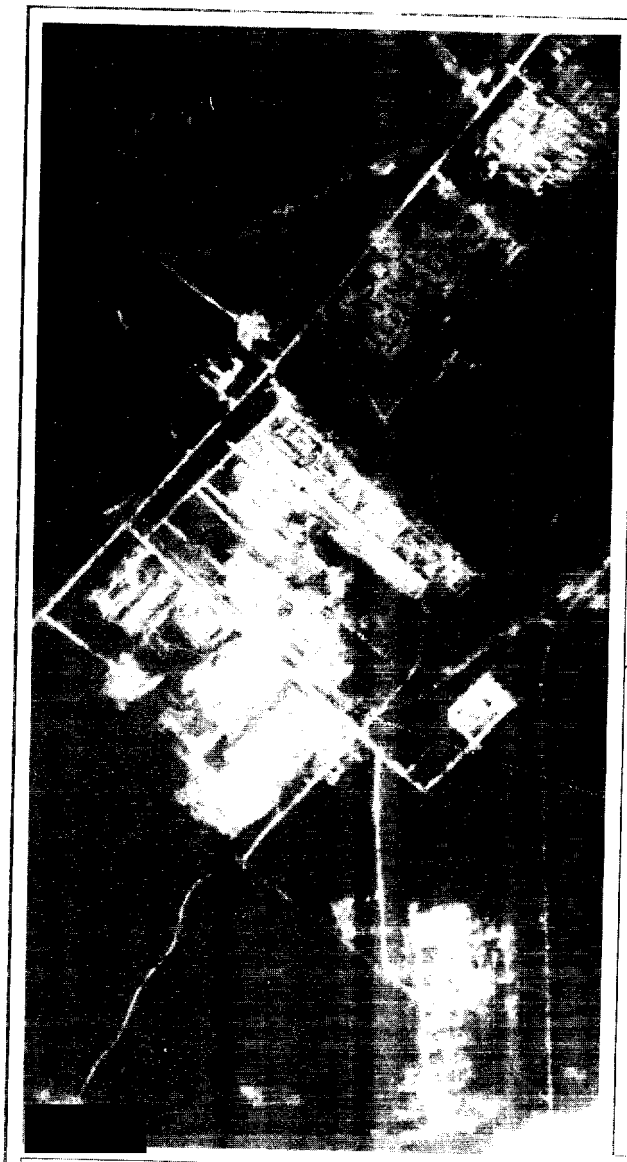
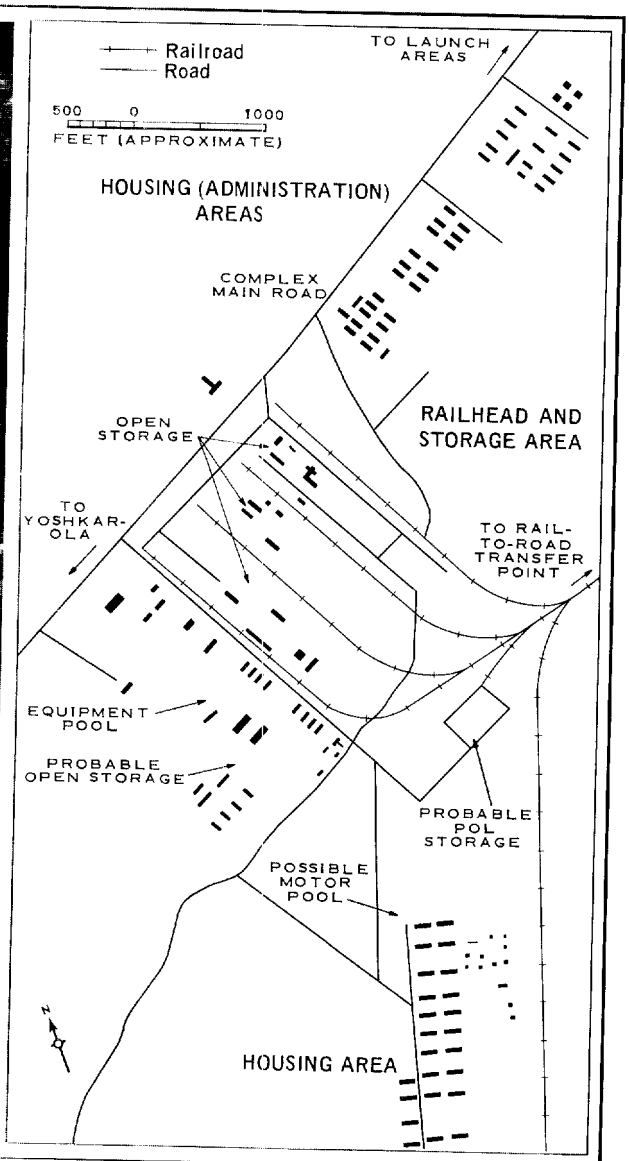
25X1D





RAILHEAD AND STORAGE AREA	
1 T-shaped building	100' x 35'
	80' x 35'
1 T-shaped building	135' x 45'
	110' x 45'
1 I-shaped building	135' x 45'
	75' x 45'
1 Building	300' x 70'
1 Building	160' x 75'
6 Buildings	160' x 50'
6 Buildings	140' x 45'
4 Buildings	135' x 45'
15 Buildings	90' x 40'

HOUSING AREA	
3 Barracks-type buildings	185' x 45'
22 Barracks-type buildings	180' x 55'
12 Buildings	55' x 35'

HOUSING (ADMINISTRATION) AREAS	
4 Buildings	140' x 45'
10 Buildings	110' x 50'
1 Building	160' x 30'
24 Buildings	110' x 30'
4 Buildings	80' x 50'

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FIGURE 2. COMPLEX SUPPORT FACILITY.

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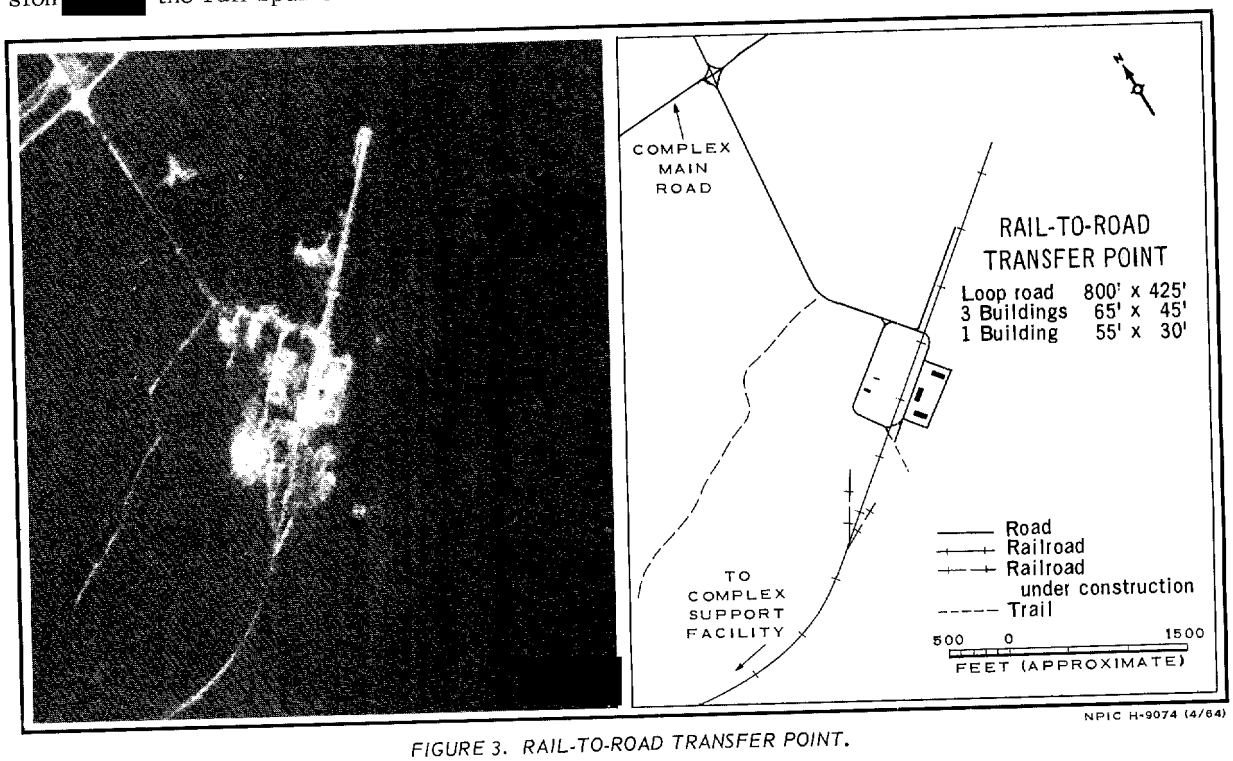
other two areas, separated only by a small strip of woods, are on the south side of the complex main road to the northeast of the railhead and storage area. One area contains 24 buildings, the other 19. Barracks-type buildings are predominant in both areas.

The only significant change apparent in the railhead and storage area since it was first seen in [redacted] is the addition of six large buildings on the southwest side. These first appeared in [redacted] 25X1D 25X1D. Two of the three housing areas were cloud covered when the area was first seen in [redacted] 25X1D. However, they were all present in [redacted] 25X1D. The two areas on the south side of the complex main road have been expanded since that time by the addition of more buildings.

RAIL-TO-ROAD TRANSFER POINT

The rail-to-road transfer point (56-33N 48-04E) is about 2 nm east of the complex support facility. It is in a densely wooded area and no security measures are apparent. It is a completed loop-type transfer point with a minimum of facilities (Figure 3). Only five buildings are present. In [redacted] 25X1D (Mission [redacted] 25X1D) the rail spur extended in the direction of the transfer point but the facility itself was not present. On photography of [redacted] 25X1D 25X1D, ground scarring was apparent but poor image quality precluded detailed interpretation. In [redacted] 25X1D (Mission [redacted] 25X1D) the transfer point was apparently complete and has shown no significant change since that time.



25X1D

FIGURE 3. RAIL-TO-ROAD TRANSFER POINT.

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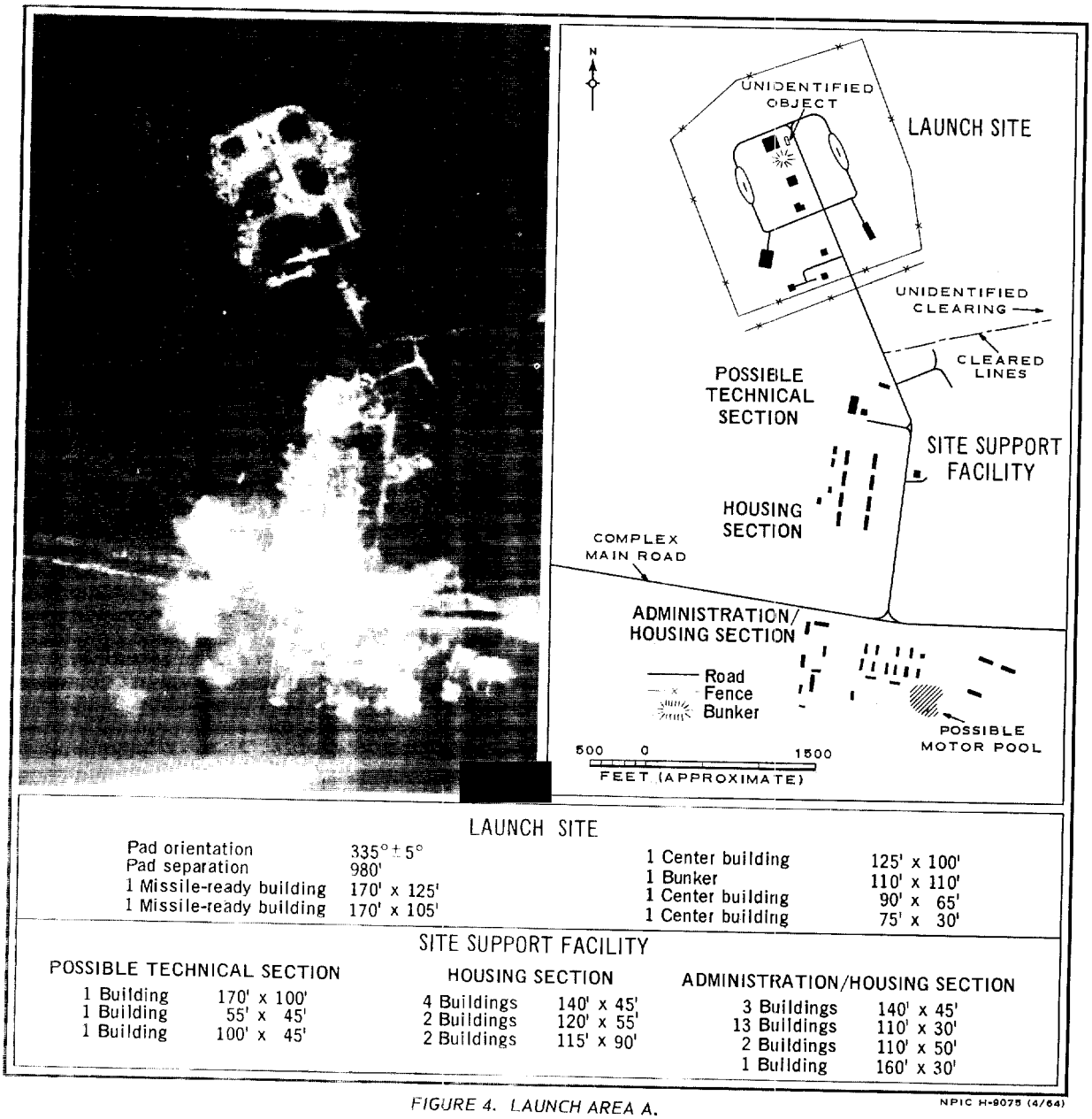
LAUNCH AREA A

Launch Area A consists of a completed Type IIB launch site and a site support facility (Figure 4). It is located about 4 nm east of the complex support facility in a heavily wooded area that was cleared for the site. TALENT photography of [redacted] (Mis- 25X1D

25X1D



LAUNCH SITE

Pad orientation	335° ± 5°	1 Center building	125' x 100'
Pad separation	980'	1 Bunker	110' x 110'
1 Missile-ready building	170' x 125'	1 Center building	90' x 65'
1 Missile-ready building	170' x 105'	1 Center building	75' x 30'

SITE SUPPORT FACILITY

POSSIBLE TECHNICAL SECTION		HOUSING SECTION		ADMINISTRATION/HOUSING SECTION	
1 Building	170' x 100'	4 Buildings	140' x 45'	3 Buildings	140' x 45'
1 Building	55' x 45'	2 Buildings	120' x 55'	13 Buildings	110' x 30'
1 Building	100' x 45'	2 Buildings	115' x 90'	2 Buildings	110' x 50'
				1 Building	160' x 30'

FIGURE 4. LAUNCH AREA A.

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25X1D sion [redacted] showed no activity in the area. First identified on photography of [redacted] (Mission [redacted] it was considered to have been complete in [redacted].

The launch site has three buildings and a bunker on the left side of the offset center service road. At the right front of the bunker is an unidentified linear object. An erector/shelter is apparent on each pad. A missile-ready building is directly behind and in line with the right pad. The missile-ready building behind the left pad is canted outward about 30 degrees. [redacted]

The site support facility is situated south of the launch site and consists of an administration/housing section, a housing section, and a possible technical section. No security measures are apparent. The largest of the sections is the administration/housing section, on the south side of the complex main road at its junction with the site access road. This section contains a possible motor pool and 22 buildings. Three large buildings are just east of this section. The housing section is on the west side of the access road. It contains 12 buildings, 6 of which are probably barracks. Across the access road is a single road-served building. The possible technical section is about 1,000 feet south of the launch site on the west side of the access road. It is road served and has wide-radius turns at the junction with the access road. There are one small and two large buildings in this section. On the opposite side of the access road are some cleared lines in the wooded area leading to an unidentified clearing.

LAUNCH AREA B

Launch Area B consists of a completed Type IIB launch site and a site support facility (Figure 5). It is located about 7.5 nm east of the complex support facility in a heavily wooded area that had to be cleared for construction. Activity at the launch area was first seen in [redacted]. There was no activity in the area in [redacted] The launch site was considered complete in [redacted]

It is a typical Type IIB site, enclosed by a double security fence that measures approximately 2,000 feet north-south and 2,200 feet east-west. A possible erector/shelter is present on each pad. One missile-ready building canted outward about 30 degrees is situated behind the left launch pad. To the left of the offset center service road are two unidentified objects and two buildings, one of which is bunkered. [redacted]

The site support facility is situated south of the launch site and contains an administration/housing section, a possible technical section, a motor/equipment pool, and an unidentified section. The administration/housing section contains about 30 buildings. Nine of these

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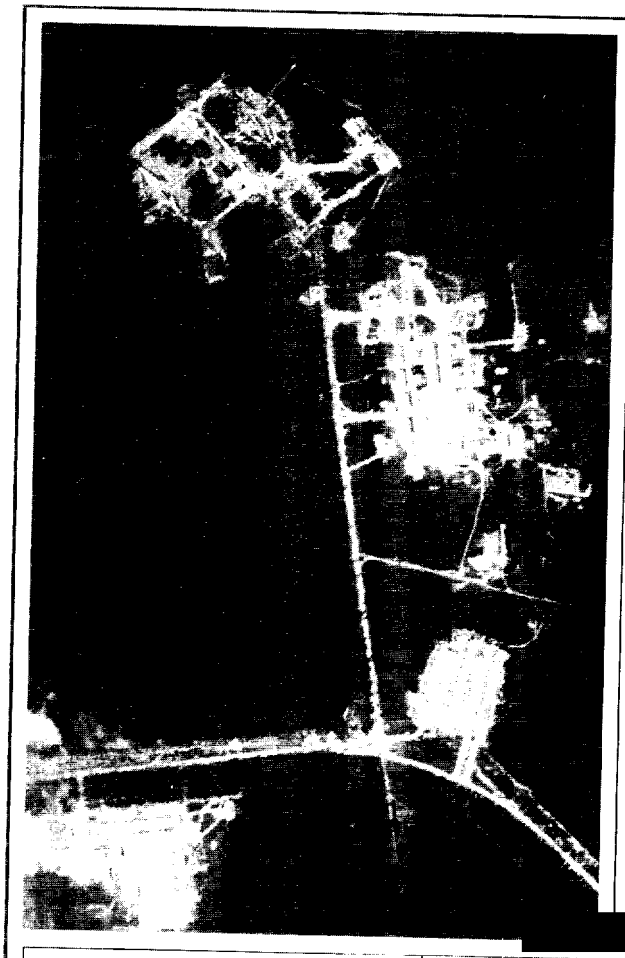
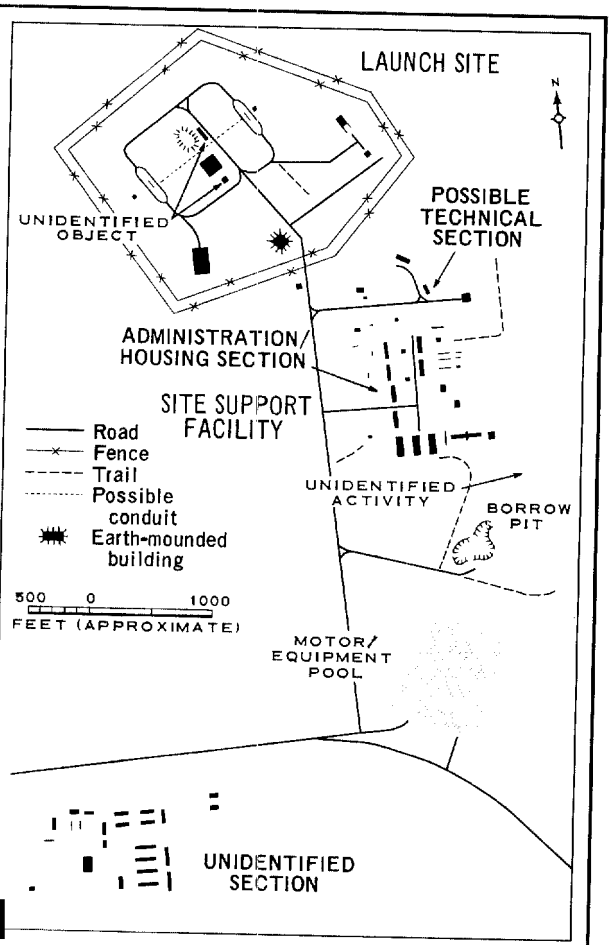
are barracks-type buildings; 10 others, including a plus-shaped building, may be administrative; the rest are small miscellaneous buildings. The possible technical section contains five buildings, one of which is served by a road from the access road characterized by wide-radius turns at the junction. The motor/equipment pool and the unidentified section may be features of the complex rather than directly associated with this site support facility. The unidentified section contains 23 buildings; 11 could be either barracks or storage buildings and the rest are small miscellaneous structures.





25X1D

LAUNCH SITE	
Pad orientation	335° ± 5°
Pad separation	980'
1 Missile-ready building	175' x 125'
1 Center building	110' x 110'
1 Center building	110' x 45'
1 Earth-mounded building	90' x 90'
1 Building	90' x 45'
1 Building	45' x 45'

SITE SUPPORT FACILITY	
POSSIBLE TECHNICAL SECTION	
1 Building	120' x 80'
1 Building	80' x 40'
UNIDENTIFIED SECTION	
6 Buildings	160' x 50'
5 Buildings	140' x 45'

ADMINISTRATION/HOUSING SECTION	
3 Buildings	160' x 45'
2 Buildings	125' x 50'
2 Buildings	140' x 30'
2 Buildings	90' x 55'
1 Plus-shaped building	220' x 30'
	70' x 30'
2 Buildings	70' x 30'
5 Buildings	90' x 30'

FIGURE 5. LAUNCH AREA B.

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LAUNCH AREA C

Launch Area C has a completed Type IIB launch site and a site support facility (Figure 6). It is situated in a heavily wooded area about 13 nm east of the complex support facility. The area was first seen in [redacted] 25X1D when only an extension of the complex main road beyond Launch Area B was present. It was considered complete in [redacted] 25X1D

The launch site is enclosed by a single fence but there is an open ditch just outside the fence on all four sides. This ditch appears to drain into a small pond at the northwest corner of the site. The enclosed area measures 1,825 feet in the north-south direction and

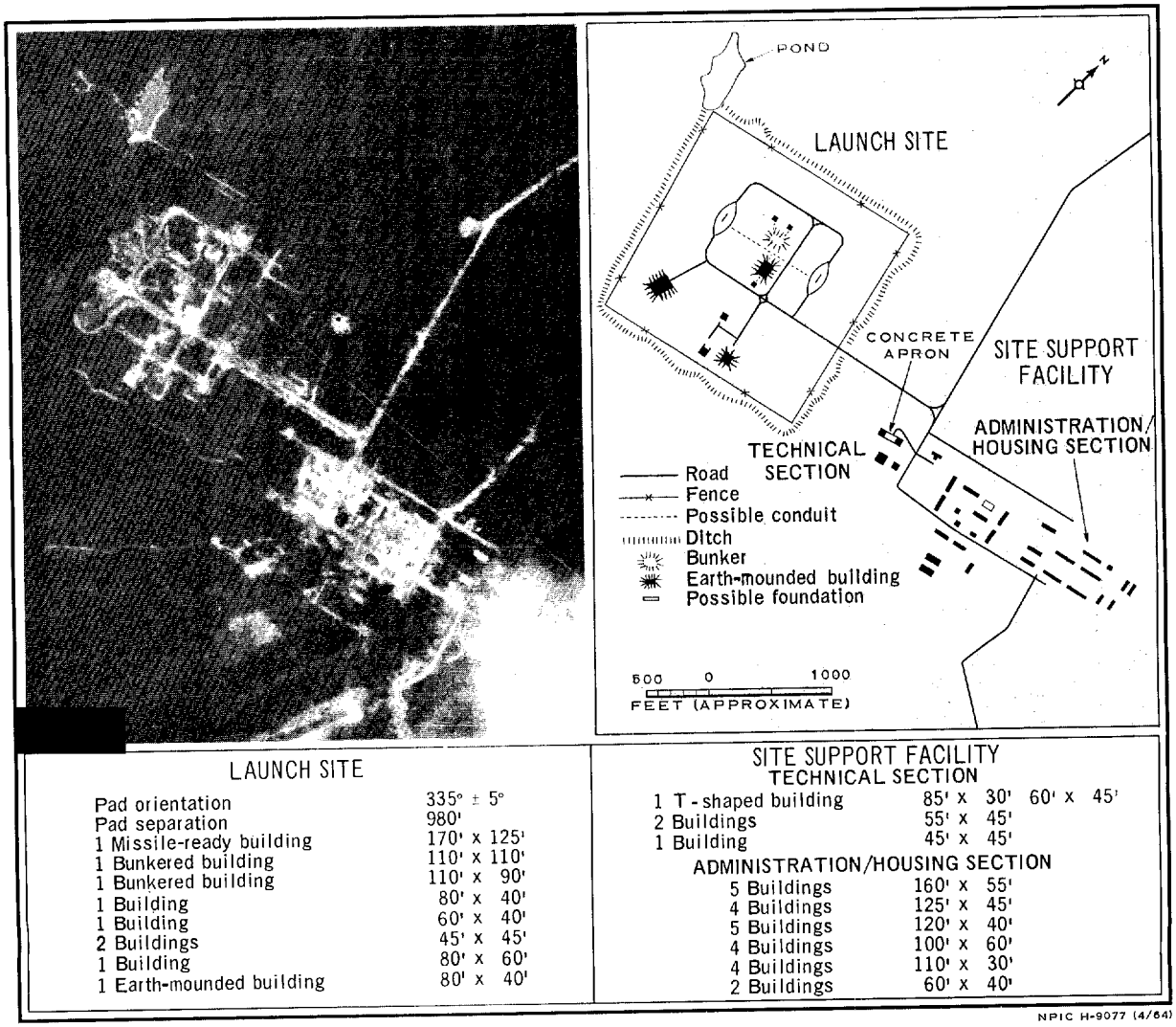

FIGURE 6. LAUNCH AREA C.

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1,930 feet in the east-west. The single missile-ready building behind the left pad is canted outward about 25 degrees. It is apparently earth mounded. Five buildings are on the left side of the offset center service road. One of these is bunkered and another is earth mounded. In front of the bunkered building are two small square buildings. To the rear of the earth-mounded building is another small building. All five of these are interconnected by what may be cable conduits. The same type of conduit connects the bunker with both pads. Details of the pad area are vague on Mission [redacted] 25X1D
[redacted] 25X1D Although other items in the launch site stand out clearly, the pads show dark and their outlines are not apparent. A possible erector/shelter is apparent on each pad. To the rear of the site is an earth-mounded building. It is road served by an extension of the center service road. Wide-radius turns are apparent at the road junction. A short distance west of the earth-mounded building is a rectangular building with a prominent wall or wing jutting out to the front from either [redacted] 25X9

The site support facility is situated east of the launch site. It consists of an administration/housing section and a technical section. The administration/housing section contains about 27 buildings and what appears to be the foundation for another. The technical section has five buildings, one of which is T-shaped. What appears to be a concrete apron is between two of the buildings.

LAUNCH AREA D

Launch Area D consists of a completed Type IID launch site and a site support facility (Figure 7). It is situated in a heavily wooded area about 11 nm east-southeast of the complex support facility. Activity at the area was first apparent in [redacted] 25X1D
[redacted] 25X1D There were no signs of construction in the area in [redacted] 25X1D
The launch site was considered complete in [redacted] 25X1D No security measures can be identified.

The launch site is apparently either an early version of the IID type or it may have been started as a IIB site and later changed. Pad details are vague on Mission [redacted] 25X1D
[redacted] 25X1D the pad area is dark and does not have the clear-cut white image of concrete. Several objects are apparent on the pads; they may be the erectors/shelters and some vehicles, but no positive identification is possible. There is a road-served probable building outboard of each pad. A clearing is apparent for a forward loop road connecting the pads, but the road does not appear to be surfaced. Also, there is no offset center service road running from the back of the site through to the front. There are two canted buildings inboard of each pad: the two at the right appear much smaller than the standard canted building. Three other buildings are situated near the center of the site; one of the buildings, possibly earth mounded, is connected to each pad by what may be cable conduits. A single earth-mounded missile-ready building is to the rear of the left pad and is canted about 30 degrees outward. [redacted] 25X9

The site support facility is situated about

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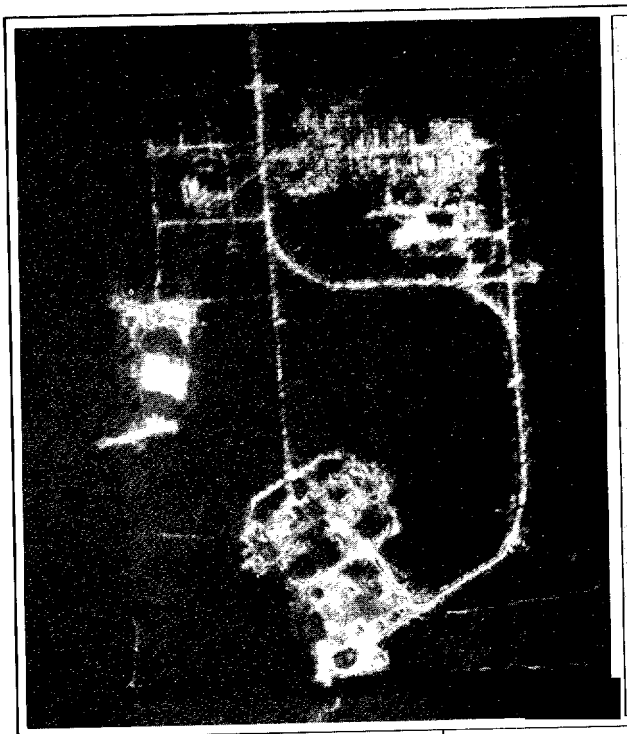
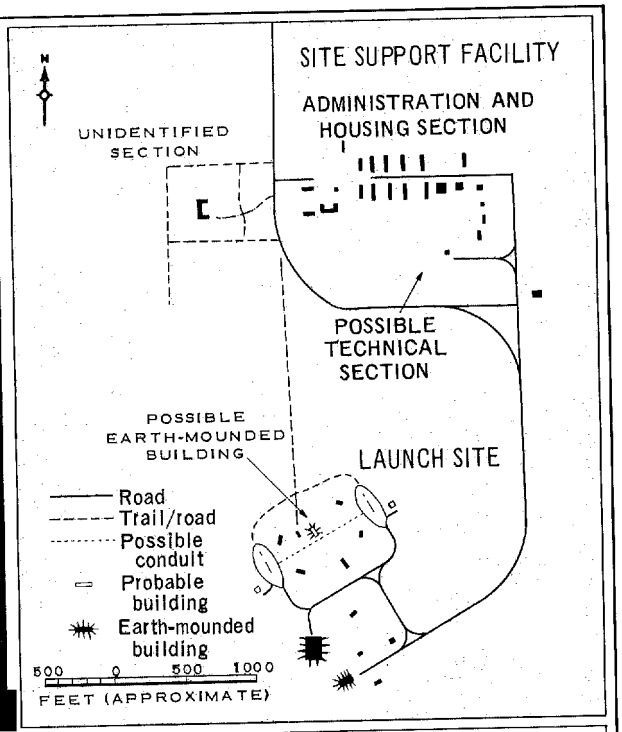
2,000 feet north of the launch site, most of it on the east side of the access road. It consists of an administration and housing section, a possible technical section, and an unidentified section on the west side of the access road. The administrative part of the administration and housing section contains five buildings, one of which is U-shaped. The adjoining housing part of the section contains 16 buildings, 8 of which appear to be barracks. The possible technical section contains only two small buildings and a road-served concrete apron. The radius of the turns at the junction with the access road is slightly increased, but not as much as at turns within the launch site. The unidentified section contains one U-shaped building within a generally rectangular pattern of roads or trails.





25X1D

LAUNCH SITE	
Pad orientation	335°±5°
Pad separation	980'
1 Missile-ready building	175' x 125'
1 Building	110' x 40'
1 Earth-mounded building	110' x 90'
2 Canted buildings	90' x 30'
2 Canted buildings	50' x 30'
1 Building	60' x 45'
1 Building	45' x 45'

SITE SUPPORT FACILITY			
POSSIBLE TECHNICAL SECTION		ADMINISTRATION AND HOUSING SECTION	
1 Building	90' x 40'	1 U-shaped building	140' x 45'
1 Building	60' x 40'		50' x 45'
		8 Barracks-type buildings	140' x 45'
		1 Building	110' x 110'
		2 Buildings	110' x 40'
		4 Buildings	110' x 30'
		1 Building	90' x 80'
		1 Building	90' x 50'
		1 Building	60' x 50'

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FIGURE 7. LAUNCH AREA D.

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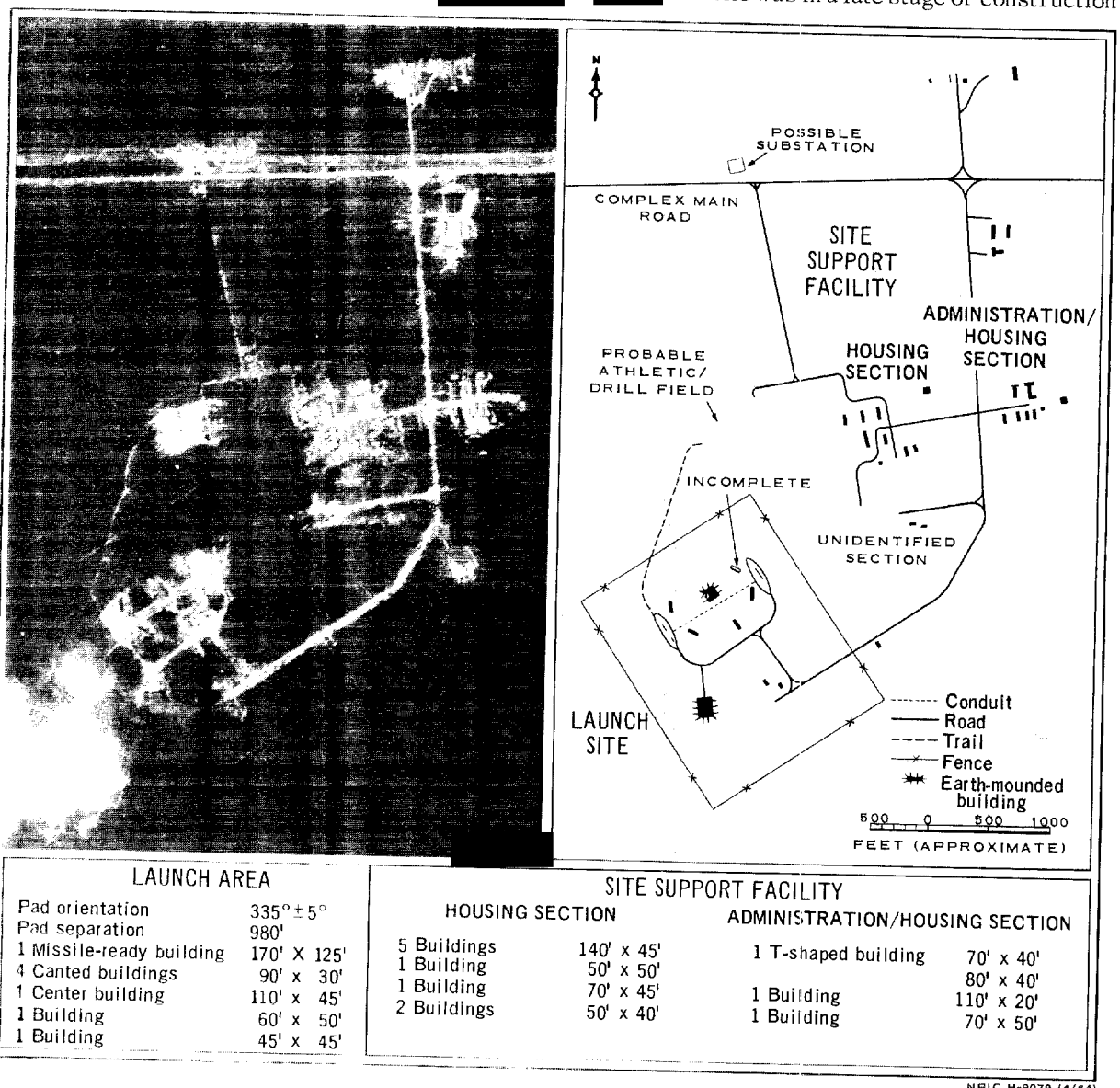
LAUNCH AREA E

Launch Area E is situated in a heavily wooded area 6 nm east of the complex support facility on the south side of the complex main road. It consists of a Type IID launch site and a site support facility (Figure 8). There was no evidence of the launch site in [redacted] (Mission [redacted] although construction of the site support facility was apparent. First evidence of the launch site was in [redacted] sion [redacted] At this time the site was in a mid-stage of construction. In [redacted] (Mission [redacted] the site was in a late stage of construction.

25X1D 25X1D 25X1D 25X1D 25X1D 25X1D



LAUNCH AREA	
Pad orientation	335° ± 5°
Pad separation	980'
1 Missile-ready building	170' X 125'
4 Canted buildings	90' x 30'
1 Center building	110' x 45'
1 Building	60' x 50'
1 Building	45' x 45'

SITE SUPPORT FACILITY			
HOUSING SECTION		ADMINISTRATION/HOUSING SECTION	
5 Buildings	140' x 45'	1 T-shaped building	70' x 40'
1 Building	50' x 50'		80' x 40'
1 Building	70' x 45'	1 Building	110' x 20'
2 Buildings	50' x 40'	1 Building	70' x 50'

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FIGURE 8. LAUNCH AREA E.

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The launch site is surrounded by a single security fence, the enclosed area measuring about 2,180 by 1,700 feet. One missile-ready building is present behind the left pad. It is canted outward about 30 degrees and appears to be earth mounded. One large earth-mounded building in the center of the site is apparently connected to each pad by cable conduits. There are two canted buildings inboard of each pad. One of those by the right pad does not appear to be complete. There are two unidentified objects on the left pad and one on the right.

25X9 [redacted]

The site support facility includes an administration/housing section, a housing section, and an unidentified section. These are situated northeast of the launch site on both sides of the access road. The administration/housing section contains eight buildings. The housing section contains nine buildings, five of which appear to be barracks. Just west of the housing section is a clearing that measures 500 by 400 feet. This is probably an athletic/drill field. The unidentified section is just south of the housing section and contains two buildings and a section of road that ends at a small open area.

Near the junction of the access road with the complex main road are two cleared areas. One area contains two large buildings and a T-shaped building; the other has one medium-sized and three small buildings. These areas may be associated with the overall complex rather than directly with Launch Area E.

LAUNCH AREA F

Launch Area F is situated on the crest of a low hill in a heavily wooded area 13 nm east-northeast of the complex support facility. It was first seen in [redacted] (Mission

25X1D

25X1D [redacted] and was not there in [redacted] (Mission The launch area consists of a Type IID launch site and a site support facility (Figure 9).

25X1D The launch site is in a late stage of construction as of [redacted] No security fence can be identified. All the usual buildings are present and apparently only a little work remains to be done on the right pad. A possible cable conduit joins the center building and both pads. There are three missile-ready buildings, two behind the left pad and one behind the right pad. Two of these are canted to the left about 30 degrees. The

25X9 [redacted]

25X9 [redacted]

The site support facility is southwest of the launch site. It consists of an administration and housing section and two areas of unidentified activity. The administration and housing section, on the north side of the access road, contains a total of 15 buildings including 6 barracks type and one T-shaped which is probably administrative. One of the areas of unidentified activity is on the south side of the access road across from the administration and housing section. It consists of a small road-served clearing and two buildings. This facility could be a motor pool. The other area of unidentified activity is southwest of the administration and housing section on the same side of the access road. It is on the bank of

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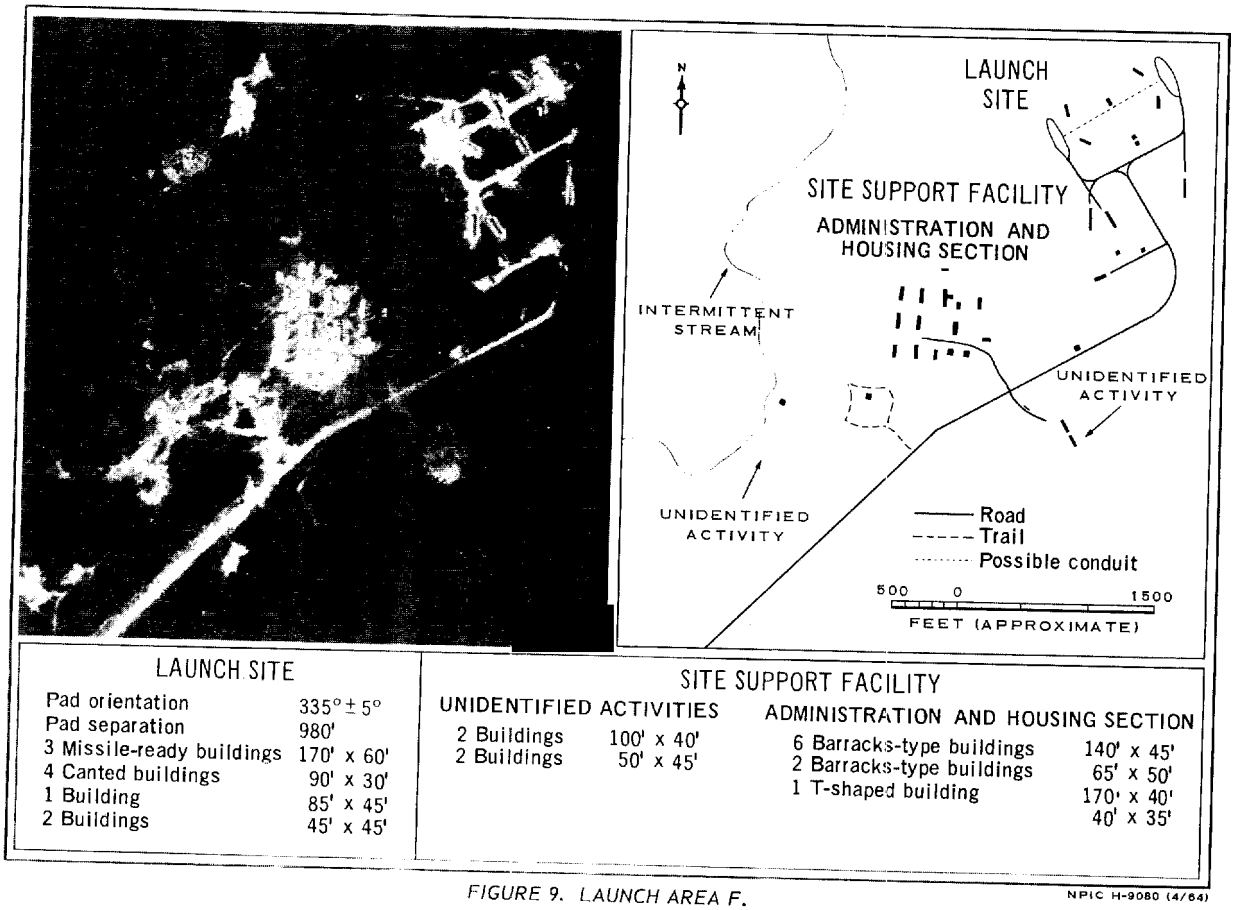
a stream and ground scarring is apparent throughout the area. Two small buildings are present. The general appearance suggests a borrow pit.



25X1D

LAUNCH SITE	
Pad orientation	335° ± 5°
Pad separation	980'
3 Missile-ready buildings	170' x 60'
4 Canted buildings	90' x 30'
1 Building	85' x 45'
2 Buildings	45' x 45'

SITE SUPPORT FACILITY			
UNIDENTIFIED ACTIVITIES		ADMINISTRATION AND HOUSING SECTION	
2 Buildings	100' x 40'	6 Barracks-type buildings	140' x 45'
2 Buildings	50' x 45'	2 Barracks-type buildings	65' x 50'
		1 T-shaped building	170' x 40'
			40' x 35'

FIGURE 9. LAUNCH AREA F.

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REQUIREMENT

NPIC. PC 806-63 (partial answer)

NPIC PROJECT

J-368/63 (partial answer)

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PHOTOGRAPHIC INTERPRETATION REPORT

ICBM COMPLEX, YOSHKAR-OLA, USSR

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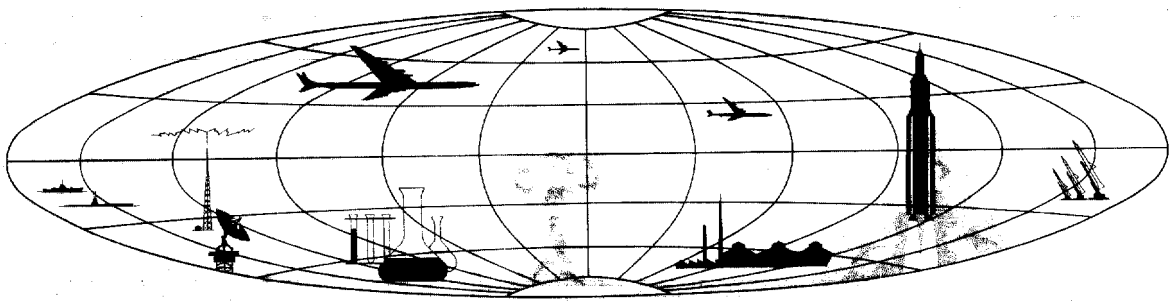

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